

What is claimed:

1. A method of improving security processing in a computing network, comprising steps of:
providing security processing in an operating system kernel;
providing an application program which makes use of the operating system kernel during execution;
providing security policy information;
executing the application program; and
selectably securing at least one communication of the executing application program using the provided security processing in the operating system kernel, under conditions specified by the security policy information.
2. The method according to Claim 1, wherein the security policy information is stored in a security repository.
3. The method according to Claim 2, wherein the security policy information is usable for more than one executing application program.
4. The method according to Claim 1, wherein the conditions include network addresses.
5. The method according to Claim 4, wherein the network addresses specify one or more of server addresses and destination addresses.

- 1 6. The method according to Claim 4, wherein the network addresses include ranges of
2 source addresses and/or ranges of destination addresses.
- 1 7. The method according to Claim 1, wherein the conditions include one or more port
2 numbers and/or one or more port number ranges.
- 1 8. The method according to Claim 1, wherein the conditions include one or more job names.
- 1 9. The method according to Claim 1, wherein the conditions include one or more client
2 identifiers.
- 1 10. The method according to Claim 1, further comprising the step of checking the security
2 policy information when the executing application program establishes a connection, and wherein
3 the selectably securing step communicates on that connection according to a result of the
4 checking step.
- 1 11. The method according to Claim 1, whereby communications from the executing
2 application program may be secured even though the provided application program has no code
3 for security processing.
- 1 12. The method according to Claim 1, wherein the provided application program includes
2 invocation of one or more security directives, and further comprising the step of executing, during

3 execution of the provided application program, one or more of the invoked security directives.

1 13. The method according to Claim 1, wherein, when a result of evaluating the security policy
2 information so indicates, the selectably securing step thereby secures only some sockets of a port.

1 14. The method according to Claim 1, wherein the provided security processing operates in a
2 Transmission Control Protocol layer of the operating system kernel.

1 15. The method according to Claim 1, wherein the provided security processing implements
2 Secure Sockets Layer.

1 16. The method according to Claim 1, wherein the provided security processing implements
2 Transaction Layer Security.

1 17. A system for improving security processing in a computing network, comprising:
2 means for performing security processing in an operating system kernel;
3 security policy information specifying one or more conditions under which the means for
4 performing security processing is to be activated;
5 means for executing an application program which makes use of the operating system
6 kernel during execution; and
7 means for selectably securing, according to the conditions specified by the security policy
8 information, at least one communication of the executing application program using the means for

9 performing security processing.

1 18. A computer program product for improving security processing in a computing network,
2 the computer program product embodied on one or more computer-readable media and
3 comprising:

4 computer-readable program code means for performing security processing in an
5 operating system kernel;

6 computer-readable program code means for accessing security policy information, the
7 security policy information specifying one or more conditions under which the computer-readable
8 program code means for performing security processing is to be activated;

9 computer-readable program code means for executing an application program which
10 makes use of the operating system kernel during execution; and

11 computer-readable program code means for selectably securing, according to the
12 conditions specified by the security policy information, at least one communication of the
13 executing application program using the computer-readable program code means for performing
14 security processing.